



**GOVERNMENT OF INDIA  
TARIFF COMMISSION**

**REPORT  
ON  
The Continuance of Protection to the  
Automobile Sparking Plug Industry**

सत्यमेव जयते

**BOMBAY 1960**

**IN INDIA BY THE MANAGER GOVT OF INDIA PRESS  
AND PUBLISHED BY THE MANAGER OF PUBLICATIONS  
DELHI 1960**

*Price : Rs. 1.40 or 2s.*

## PERSONNEL OF THE COMMISSION

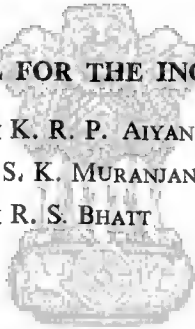
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सत्यमेव जयते

SECRETARY

DR. RAMA VARMA

GOVERNMENT OF INDIA  
MINISTRY OF COMMERCE & INDUSTRY

New Delhi, the 19th September, 1960.

**RESOLUTION**

**Tariffs**

**No. 21(3)-T.R./60.**—The Tariff Commission has submitted its Report on the continuance of protection to the Automobile Sparking Plug Industry on the basis of an inquiry undertaken by it under Sections 11(e) and 13 of the Tariff Commission Act, 1951. Its recommendations are as follows :—

- (1) Protection to the industry should be continued up to 31st December, 1963 at the existing rates of duty.
- (2) The industry should make efforts to tap indigenous sources for the supply of raw materials such as cement filler and high refractory cement powder.
2. Government accept recommendation (1) and necessary legislation will be undertaken in due course.
3. The attention of the industry is drawn to recommendation (2).

**ORDER**

ORDERED that the Resolution be published in the *Gazette of India* and a copy of it communicated to all concerned.

K. R. F. KHIENANI,  
Joint Secretary to the Government of India.

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## REPORT ON THE CONTINUANCE OF PROTECTION TO THE AUTOMOBILE SPARKING PLUG INDUSTRY

**Previous tariff inquiries** 1. The first inquiry into the claim of the automobile sparking plug industry to protection and assistance was held by the Commission in 1954 and on its recommendation protection was granted to this industry up to 31st December 1955 by enhancing the standard rate of import duty of 25 per cent *ad valorem* on sparking plug to 92½ per cent *ad valorem*. In order to maintain the preference of 7½ per cent *ad valorem* on sparking plugs of British manufacture adopted for use in motor trucks, the rate of protective duty on this class of plugs was fixed at 85 per cent *ad valorem*. The Commission undertook a review of the scheme of protection in 1955 and recommended in its Report submitted in September 1955 that the existing rates of protective duty should be continued up to 31st December 1956 and that the scheme of protection should be reviewed and the rates of duty revised, if necessary, when adequate data became available about the actual cost of production of central electrodes which were then being imported as sub-assembly with the insulators. The Commission further recommended that in order to encourage the domestic industry to carry out its manufacturing programme it should be assured of protection for a period of five years from 1st January 1956. Government accepted these recommendations and extended protection for a further period of five years ending 31st December 1960 by the Indian Tariff (Third Amendment) Act, 1955. Sparking plugs for use exclusively in agricultural tractors were, however, excluded from the scheme of protection. Government also accepted the Commission's recommendation to exempt for a period of one year insulators (not fitted with central electrodes) imported for use in the manufacture of sparking plugs from import duty. In consultation with the Commission this concession was extended up to 29th May 1959. Government did not agree to continue this concession further, though the Commission had recommended its continuance up to 31st December 1960.

**Present inquiry** 2. As protection granted to the industry is due to expire on 31st December 1960, we have undertaken the present inquiry under Section 11(e) read with Section 13 of the Tariff Commission Act, 1951 by which the Commission is empowered to take action in relation to protection granted to an industry with a view to its increase, decrease, modification or abolition according to the circumstances of the case.

**Method of inquiry** 3.1. Questionnaires were issued to producers importers and consumers of sparking plugs on 1st January 1960. Subsequently, a press note was issued on 6th January 1960 inviting firms, persons or associations interested in the sparking plugs industry to obtain copies of the relevant questionnaires from the Secretary to the Commission. The Senior Industrial Adviser, Development Wing, Ministry of Commerce

and Industry was requested to submit a memorandum on the progress of the industry since the last inquiry. The Secretary to the Government of India, Ministry of Defence, the Indian Institute of Science, Bangalore, the Director, Central Glass and Ceramic Research Institute and the Director, Indian Standards Institution were requested to furnish information on relevant points. The Collectors of Customs at Bombay, Calcutta, Madras and Cochin were requested to furnish data regarding the c.i.f. prices and landed costs of sparking plugs imported through their ports. The Directors of Industries of the States of Bombay and Mysore in which manufacturing units are situated were requested to furnish memoranda on the industry. The other Governments were invited to communicate their views to the Commission on the general aspect of continuance of protection to the industry. A list of those to whom questionnaires and letters were issued and from whom replies or memoranda have been received is given in Appendix I.

3.2. Shri K. R. P. Aiyangar, Chairman visited the factories of Motor Industries Co. Ltd. (MICO) and Government Porcelain Factory, both at Bangalore on 27th April 1960. Dr. S. K. Muranjan and Shri R. S. Bhatt, Members visited the factory of Motor Industries Co. Ltd. on 2nd May 1960 and the Indian Institute of Science, Bangalore on 4th May 1960. The Chairman, Dr. Muranjan and Shri Bhatt, Members of the Commission also visited the factory of Auto Accessories (India) Private Ltd. on 5th May 1960. Shri Hari Bhushan, Technical Director (Engineering & Metallurgy) and Shri C. S. Ambady, Research Officer (Engineering) visited Auto Accessories on 14th December 1959. Shri Ambady also visited MICO on 14th April 1960.

3.3. Motor Industries Co. Ltd. was selected for costing. The cost investigation was undertaken at the firm's factory from 12th to 18th April 1960 by Shri P. M. Menon, Cost Accounts Officer.

3.4. The public inquiry into the industry was held on 6th May 1960. A list of representatives of different interests who attended the inquiry is given in Appendix II.

4.1. The present scheme of protection covers sparking plugs of 14 mm. and 18 mm. sizes and parts thereof, including resistor types, but excluding integrally screened types. It also excludes sparking plugs adapted for use exclusively as parts and accessories of agricultural tractors. In the context of the general view that progressive dieselisation of commercial vehicles has affected the size of the demand for sparking plugs, it was sought to be ascertained whether there would not be some substitute demand for heater plugs which are used in diesel engines and if so, whether this should be included in the scope of the inquiry. We were informed that at present only Mercedes-Benz uses heater plugs and due to the fact that such plugs supplied as original equipment have relatively long life no sizeable demand for them is likely to develop and that neither of the manufacturers of sparking plugs, therefore, contemplated their production. At the public inquiry a representative of the trade suggested that the

#### **Scope of the inquiry**

resistor plugs which are not being made by the two producers and special plugs for racing motor cycles and automobiles within the dimensions of 14 mm. and 18 mm. should be excluded from the scope of protection.

4.2. Resistor plugs are mainly used in vehicles to prevent interference in radio and, with the limited number of cars fitted with radios, the demand for them will be relatively small. And there is hardly any demand for special types for racing vehicles. In the circumstances we have confined our inquiry to the existing protected categories only and see no reason for changing its scope.

5.1. The latest position in regard to implementation of the ancillary recommendations made by the Commission in its last Report is given below : --  
**Implementation of the Commission's ancillary recommendations in its last Report (1955)**

#### 5.2. *Recommendation.*

"The protected categories of sparking plugs should be described in the Indian Customs Tariff as 'Sparking plugs of 14 mm. and 18 mm. sizes, including the resistor types but excluding integrally screened types' without any distinction as to the types of engines or vehicles in which the plugs are used."

Government accepted the recommendation with the modification that sparking plugs for use exclusively in agricultural tractors would be excluded from the scope of protection. Accordingly I.C.T. item No. 75(16) relating to sparking plugs was modified by the Indian Tariff (Third Amendment) Act, 1955.

#### 5.3. *Recommendation.*

"Insulators (not fitted with central electrodes) imported for use in the manufacture of sparking plugs should be exempted from duty for a period of one year. In the meanwhile, the industry should take steps to evolve a concrete project for manufacturing insulators in the country."

As mentioned earlier, Government accepted our recommendation to allow insulators for sparking plugs to be imported free of duty and that concession was continued up to 29th May 1959. In the meanwhile, hardly any steps had been taken to manufacture insulators in the country, though the Commission's recommendation was specific on this point. The manufacturers have contended that unless they are assured a minimum volume of one million a year, it would not be economical for them to undertake the manufacture of insulators. It was also observed that in other countries where insulator manufacture is undertaken, it is produced in millions. However, Motor Industries Co. explored the possibilities of Government Porcelain Factory Bangalore, undertaking the manufacture of insulators. Meanwhile, the Central Glass and Ceramic Research Institute evolved a process to manufacture insulators; but the manufacturers were not satisfied with the samples produced by the Institute. We are now informed that MICO has decided to go ahead with the production of insulators in collaboration with Bosch and a

scheme estimated to cost about Rs. 25 lakhs has been submitted to Government and has received their approval. The representatives of MICO have assured us that when it starts producing insulators indigenously, the cost of the finished plug will not be put up, even if the cost of indigenously produced insulator is higher than that of the imported one. It has also to be ensured that MICO meets the requirements of Auto Accessories.

#### 5.4. *Recommendation.*

"Import of sparking plugs should be allowed only to the extent required to bridge the gap between the estimated demand and indigenous production."

The import of 14 mm. and 18 mm. sparking plugs under protection has been completely banned since October 1957. Only 5 per cent soft and 5 per cent general quota is now allowed to meet the demand for other sizes which are not manufactured by the industry.

#### 5.5. *Recommendation.*

"Government should make arrangements for the periodical testing of the quality of indigenous sparking plugs. The manufacturers should also get their products periodically tested by the Indian Institute of Science, Bangalore."

The Indian Institute of Science, Bangalore provides satisfactory facilities for testing of sparking plugs. We are informed that the Indian Standards Institution has finalised a testing scheme for sparking plugs. It avails itself of the testing facilities at the Indian Institute of Science, Bangalore. MICO has already subscribed to the Certification Marks Scheme of the I. S. I. Auto Accessories has claimed that it has facilities with its collaborators in the U.K. for testing sparking plugs at the latter's Works and to obtain reports from them. It also gets its sparking plugs tested by Government Test House, Alipore. However, it has not yet joined the Certification Marks Scheme of the I. S. I. as the licence fee is considered to be high.

#### 5.6. *Recommendation.*

"Government purchases of sparking plugs should as far as possible be made from indigenous sources."

The Director General of Supplies and Disposals informed us in May 1958 that he had entered into rate contracts with indigenous producers for the purchase of sparking plugs. The State Transport Department, Madras, the Directorate of Transportation, West Bengal and the Bombay State Road Transport Corporation have also stated that they have been purchasing all their requirements of sparking plugs from indigenous sources.

6.1. Motor Industries Co. Ltd., Bangalore (MICO) and Auto Accessories (India) Private Ltd., Bombay continue to be the only two units in the country which produce automobile sparking plugs. MICO was established in 1951 with an authorised capital of Rs. 125 lakhs. It has a technical collaboration agreement with Robert Bosch GmbH, Stuttgart, West Germany for the manufacture of diesel fuel

**Present position  
of the industry**



injection equipment, sparking plugs and electrical accessories for land and marine vehicles as well as for stationary engines. The original agreement was for a period of 8 years from 1st January 1951. It has been extended by another two years up to 31st December 1960. The royalty, which was originally fixed at 4 per cent on net sales has been reduced at the instance of Government to 2 per cent from 1955. Considerable changes took place in the capital structure of the company in 1959. Till then it had four classes of shares, namely, preference, redeemable preference and ordinary A and B. Those are now converted into ordinary shares of Rs. 100 each. The company increased its issued capital also by Rs. 25 lakhs thus making the total issued capital Rs. 150 lakhs. The entire additional capital of Rs. 25 lakhs was issued to Robert Bosch GmbH. This has raised the share of Bosch from 49 per cent of the total capital to 58 per cent. The company has stated in its reply to our questionnaire that the share of Bosch will be brought back to 49 per cent when fresh rupee capital is issued. The manufacturing activities of the company are at present confined to fuel injection equipment and sparking plugs. In the case of plugs, it now makes in its own factory plug housing, earth electrode, central electrode, compensating ring and cable clamping nut. Insulators, lower disc, upper disc and clamping washer are imported. Steps taken to manufacture insulators in the country are mentioned in paragraph 5.3. The company is negotiating with a firm in Delhi for the supply of other three items, namely, lower disc, upper disc and clamping washer. The average number of workers employed by the company for production of sparking plugs in 1959 was 36. The net profits earned by the company after providing for depreciation during the past four years were Rs. 60,784 in 1955, Rs. 10,30,446 in 1956, Rs. 19,23,000 in 1957 and Rs. 69,17,011 in 15 months, i.e., from January 1958 to March 1959. These large profits, however, relate to the entire activities of the company, a major portion of which is concerned with the manufacture and sale of fuel injection equipment and its components.

6.2. Auto Accessories (India) Private Ltd. was registered in Bombay in March 1951 with an authorised capital of Rs. 10 lakhs. Its subscribed and paid up capital are Rs. 4.5 lakhs and Rs. 4.4 lakhs respectively. In April 1957, Forbes, Forbes Campbell & Co. Private Ltd., Bombay acquired controlling interest in the company by purchasing 51 per cent of the shares. The company has entered into technical collaboration agreement with Smith Motor Accessories, U. K. for a period of 10 years commencing from October 1956. According to the agreement the company is permitted to use K. L. G. trade mark. It pays a royalty of 4 per cent on sales to Smiths for the technical know-how. Its activity is confined to the manufacture of sparking plugs only. The company is making all the parts required for the plug except insulator. The average number of workers employed in 1959 was 34. It made a nominal profit of Rs. 7,970 in 1955-1956 and in the next two and a half years it made losses of Rs. 43,555 in 1956-57, Rs. 16,270 in April-September 1957 and Rs. 34,117 in October 1957-September 1958. In the year ending September 1959, it made a profit of Rs. 1,11,968.

7. In 1955 the total capacity of the two units on single shift was 685,000 plugs a year of which MICO accounted for 385,000 and Auto Accessories 300,000. In 1958 MICO informed us that taking into consideration the limited demand it has readjusted its capacity to 25,000 pieces per month on single shift. Evidently, this has not been taken note of by the Development Wing and it has reported to us the capacity of MICO at 385,000 a year. The company has now informed us that it has completed its first stage of expansion and with its existing capacity it would be able to produce 750,000 plugs a year on double shift. Auto Accessories has increased its capacity to 360,000 plugs a year on single shift and it has stated that it can work double shift and increase its production if there is sufficient demand.

8.1. The statement below gives the breakdown of production of sparking plugs of 14 mm. and 18 mm. since 1955.

*Statement showing production of sparking plugs, 14 mm. and 18 mm. during 1955, 1956, 1957, 1958, 1959 and 1960 (January-March)*

(In Nos.)

Year	MICO, Bangalore			Auto Accessories, Bombay			Grand Total
	14 mm.	18 mm.	Total	14 mm.	18 mm.	Total	
1955	326,118	42,603	368,721	174,468	1,579	176,047	544,768
1956	111,253	7,441	118,694	123,080	4,993	128,073	246,767
1957	233,309	3,836	237,145	100,223	25,351	125,574	362,719
1958	452,446	15,663	468,109	248,355	17,267	265,622	733,731
1959	617,396	17,663	635,059	239,359	7,663	247,022	882,081
1960	210,801	4,405	215,206	46,320	9,200	55,520	270,726

(Jan.-March).

The figures reported to us by MICO were a little lower than those furnished by the Development Wing for the company. It was explained to us that this discrepancy was due to the fact that the figures furnished to the Development Wing by the company included plugs of sizes other than 14 mm. and 18 mm. assembled from imported components.

8.2. Both the companies have furnished us with the targets of production which they are planning to achieve during the current year and the next three years. Those figures which are given below are liable to vary according to demand.

(In Nos.)				
	1960	1961	1962	1963
Mico . . . . .	800,000	850,000	900,000	1,000,000
Auto Accessories . . . . .	400,000	450,000	500,000	550,000

9.1: In 1954 we estimated the domestic demand for sparking plugs at 1.5 million a year divided into 1.05 million of 14 mm. size, 0.3 million of 18 mm. size and 0.15 million of other sizes. When we undertook a review of the protection granted to the industry in the following year, MICO represented that the estimated demand for 14 mm. plugs should be revised to 0.9 million and that for 18 mm. to 0.1 million. It also expected the demand to decline further due to the increasing use of diesel engines. However, we did not revise the original estimate as no definite trend could be observed during the short period after we made our first estimate. In connection with the present inquiry, the manufacturers and two of the important consumers have furnished us with their estimates of demand. Those estimates are given in Statement I.

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*Statement showing the estimates of demand for sparking plugs for the years 1960, 1961 and 1962 furnished to the Commission.*

1962

Name of the Unit	1960			1961			1962					
	Original equipment	Replacement	Miscellaneous	Total	Original equipment	Replacement	Miscellaneous	Total	Original equipment	Replacement	Miscellaneous	Total
1. Mico	120,000	850,000	30,000	1,000,000	135,000	930,000	35,000	1,100,000	150,000	1,000,000	50,000	1,200,000
2. Auto Accessories	Not furnished.	750,000	25,000	..	Not furnished.	800,000	50,000	..	Not furnished.	900,000	50,000	..
3. Mahindra & Mahindra Ltd., Bombay.	108,500	10,850	..	119,350	136,000	13,600	..	149,600	158,500	15,850	..	174,350
4. Premier Automobiles Ltd., Bombay.	Not furnished.			5,192,831		Not furnished.		5,449,518	Not furnished.			5,232,859

9.2. The demand for sparking plugs is of two types, (a) for original equipment and (b) for replacement. The demand for the former will depend on the number of new vehicles produced in a year, while that for the latter will depend on the frequency with which plugs are replaced on the vehicles on road. The requirements for original equipment on the basis of the anticipated production of petrol vehicles in 1960 would work out to 136,000, the break-up of which is given below :

Type of vehicle	No. of vehicles	(In Nos.)	
		No. of plugs per vehicle	Total
1. Hindustan Motors . . . . .	10,000	4	40,000
2. Premier Automobiles . . . . .	6,500	4	26,000
3. Standard Motors . . . . .	3,000	4	12,000
4. Mahindra & Mahindra . . . . .	5,500	4	22,000
5. Bedford, Chevrolet, Dodge, etc. Petrol trucks . . . . .	3,000	6	18,000
6. Motor cycles, auto-rickshaws, scooters . . . . .	18,000	1	18,000
			<u>136,000</u>

9.3. For assessing the replacement requirements we are adopting the 1954 basis except in the case of passenger cars for which we are assuming replacement at the rate of 4 plugs every two years, instead of 4.5 as was done in 1954. We make this modification because of the increasing number of vehicles fitted with 4 cylinder engines coming on the road. On this modified basis the replacement demand for plugs will work out to 889,562, the break-up of which is given below. The number and types of vehicles on the road given below are as furnished by the Ministry of Transport as on 15th January 1960.

Type of vehicle	No. of vehicles	(In Nos.)		
		Replacement		Total
		No. of plugs per vehicle	Frequency	
Motor cycles . . . . .	57,345	1	2 years	28,672
Auto-rickshaws . . . . .	3,567	1	8 months	5,350
Jeeps . . . . .	18,316	4	2 years	463,286
Private Motor Cars . . . . .	213,327			
Motor Cabs . . . . .	15,875			
Miscellaneous Vehicles . . . . .	28,834	4	8 months	268,254
Public vehicles . . . . .	42,507 (Assumed all diesel).	..	..	..
Goods vehicles . . . . .	137,749 (with 6 cylinders. Assumed 10% petrol vehicles in view of dieselization going on during last 5-6 years).	6	8 months	124,000
				<u>889,562</u>

9.4. Thus the total demand for replacement as well as for original equipment in 1960 will be 1 million plugs (0·890 for replacement and 0·136 for original equipment). The above estimate for replacement is also based on the assumption that the life of the plug if related to mileage will be about 10,000 miles. This may even go up to 15,000 miles under proper maintenance. In regard to the demand for the future, the Development Wing is of the view that although the production of automobiles would be on the increase, the demand for sparking plugs would not increase at the same rate because of the greater demand for diesel vehicles. The evidence before us indicates that it would be reasonable to assume an increase at the rate of 5 to 10 per cent a year during the next three years.

10. The principal raw materials required in the manufacture of sparking plugs are :—

**Raw materials**

1. Bright drawn free cutting mild steel hexagonal bars ;
2. Rectangular nickel wire ;
3. Round nickel manganese silicon alloy ;
4. Cold drawn bright M. S. tubes ;
5. Bright drawn steel wire ;
6. Sodium silicate solution ;
7. Cement filler ;
8. High refractory cement powder ; and
9. Bright drawn free cutting brass rods.

All the above materials except bright drawn free cutting brass rods are imported. Item Nos. 1, 2 and 3 are special alloys which are not likely to be produced in the country unless there is substantial demand for it to undertake economic production. Item Nos. 4 and 5 will be available shortly when the production of steel catches up with the planned target. Item No. 6, sodium silicate solution, is now available locally and the industry is trying to use it. With regard to items 7 and 8 efforts should be directed to tap indigenous sources.

11.1. The Commission in its last Report (1955) observed that the quality of the domestic sparking plugs was generally regarded as satisfactory. Complaints received at the 1955 inquiry were mainly due to improper selection of plugs in regard to heat range. It is after considerable experiments in close collaboration with the engine manufacturers that the heat range of the plug for particular makes of engines is determined. In selecting the plug for replacement the users should adhere to the plug recommended for the particular engine in the catalogues usually supplied by the producers of plugs.

11.2. The selection of sparking plugs is made by the car manufacturers with the co-operation of sparking plug producers. The producers, however, must see to it that these catalogues are made available to every dealer who also should be adequately informed in this respect to guide consumers.

11.3. MICO has stated that it manufactures sparking plugs conforming to Indian Standard Specifications, wherever applicable. It has received a licence to use the I. S. I. Certification Marks and has taken steps to stamp its plugs accordingly. It follows quality control methods laid down by Bosch and more recently by the I. S. I. which includes testing of raw materials, components and finished products. It has a well-organised floor-inspection system. The company's testing facilities include material testing equipment such as universal testing machine, hardness testing machines, crack detecting machine and other testing equipment. It has also a laboratory equipped for chemical analysis of raw materials. It has a well-organised component inspection department keeping a process check on all batches of components for dimensions and other important details. Cent per cent final inspection is carried out. MICO has also special equipment for functional testing. Periodically random batches are sent over to Germany for testing at the Works of Bosch. The company has admitted that it received occasional complaints from consumers, but has eventually found them to be due to the wrong selection of the plug. It has stated that as a result of its acquainting all dealers and users about the importance of selecting the correct heat value apart from the correct size, the number of complaints received by it has diminished to a great extent.

11.4. Auto Accessories has also stated that it has introduced quality control at various stages of operation, checking for quality and correctness as laid down by its Principals. Its technical collaborator, Smith Motor Accessories is very particular about the quality of the plugs produced in India and there is a clause in the agreement between Smiths and Auto Accessories enforcing the manufacture of sparking plugs in conformity with Smith K. L. G. sparking plugs. It gets its sparking plugs tested occasionally at its collaborator's Works in U. K. The firm also submits samples to Government Test House, Alipore and has got satisfactory reports from it. Some tests were also carried out for it by the Indian Institute of Science, Bangalore. The company has facilities for functional test. With regard to complaints received by it, it has stated that they are negligible and, as in the case of MICO, they were due to wrong selection of plugs. It makes efforts to help the customers in making correct choice of the heat range. This is borne out by the catalogues and instructions issued by both the companies to dealers and servicemen.

11.5. The Development Wing has stated that no complaints have been received against the quality of the indigenous product. Consensus of opinion of the consumers including automobile manufacturers using them as original equipment, transport undertakings and dealers is that the quality is satisfactory. A few have, however, stated that the life of the indigenous plugs is shorter than that of imported ones; but no one has established specific instances. Their arguments are based on an assumption that imported plug can last for 30,000 miles. This would be rather exceptional and not in accord with general experience.

12.1. *Import control policy*.—Import control policy for sparking plugs as laid down in List III of Appendix XXVI of the I. T. C. Schedule since July-December 1955 is given below :—

During the licensing period July-December 1955, established importers were granted General and Soft currency licences to the extent of 40 per cent of one half of their best year's imports with the proviso that not more than 33-1/3 per cent of the face value of the licences could be utilised for import of sparking plugs of 14 mm. and 18 mm. sizes. During the licensing period January-June 1956, the same quota was maintained but imports of 14 mm. and 18 mm. sizes were limited to 25 per cent of the quota licences. During July-December 1956 period the quota for General and Soft currency areas was reduced to 20 per cent. During the next licensing period namely, January-June 1957, the quota was further reduced to 5 per cent General and 5 per cent Soft. During these two licensing periods not more than 25 per cent of the face value of licences was allowed to be utilised for import of 14 mm. and 18 mm. sparking plugs. No licence was issued during July-September 1957. During the half year October 1957—March 1958 the quota was fixed at 5 per cent General and 5 per cent Soft, but imports of 14 mm. and 18 mm. sizes were banned. The same policy has been continued during the subsequent periods April-September 1958, October 1958—March 1959, April-September 1959, October 1959—March 1960 and April-September 1960.

12.2. *Imports*.—Imports of sparking plugs are recorded in cwts. in the Monthly Statistics of the Foreign Trade of India. However, the Director General of Commercial Intelligence and Statistics furnishes to the Commission imports of sparking plugs in numbers in the monthly statements. The Statement II shows country-wise imports of sparking plugs during the years 1955 to 1959. The figures for the years 1955 and 1956 do not seem to be reliable as most of the figures are stated to be either incomplete or provisional.

12.3. It will be observed that there has been a sharp decline in imports of sparking plugs since 1957 and in 1959 the imports stood at a very low figure of 8,099 plugs as compared to about 7 lakhs in 1955. This is accounted for by the fact that imports of sparking plugs (both 14 mm. and 18 mm.) have been banned since October 1957. During the earlier period the liberal imports and the existence of old disposal and trade stocks in the country have doubtless acted as a damper on the nascent industry and kept down its production.



## STATEMENT II

*Statement showing the country-wise imports of automobile sparking  
plugs during the years 1955—1959.*

Sl. No.	Countries from which imported	1955 (April-Dec.)		1956		1957		1958		1959	
		Quantity (Nos.)	Value (Rs.)	Quantity (Nos.)	Value (Rs.)	Quantity (Nos.)	Value (Rs.)	Quantity (Nos.)	Value (Rs.)	Quantity (Nos.)	Value (Rs.)
A—14 mm.											
1	United Kingdom.	258,942	264,973	80,325	78,398	46,683	60,649	24,235	30,512	6,501	9,296
2	Canada . .	173,995	634,442	281,484	384,920	35,693	56,203	2,350	3,395	..	..
3	West Germany .	2,352	69,847	798	338,408*	7,224	3,351	141	202	1,000	7,523
4	U.S.A. . .	200,198	286,488	17,214	42,471	2,918	7,469	4,516	6,275	540	3,253
5	Italy . .	1,392	3,197	..	..	..	..	..	..	..	..
6	Other Countries .	876	1,691	4,789	13,447	122	1,168	650	1,140	52	208
TOTAL		637,755	1,260,638	384,610	857,644	92,640 /	128,860	31,892	41,524	8,093	20,280

\*Value of parts included.

## STATEMENT II—Contd.

Sl. No.	Countries from which imported	1955 (April-Dec.)		1956		1957		1958		1959	
		Quantity (Nos.)	Value (Rs.)	Quantity (Nos.)	Value (Rs.)	Quantity (Nos.)	Value (Rs.)	Quantity (Nos.)	Value (Rs.)	Quantity (Nos.)	Value (Rs.)
B—18 mm.											
1.	United Kingdom	39,641	19,200	107,291	34,845	2,748	15,074	1,343	2,317	6	17
2.	Canada	39,227	84,822	61,046	42,985	17,632	25,007	2,870	3,967	..	..
3.	West Germany	..	..	1,790	4,250	..	1,096	..	1,225	..	..
4.	U.S.A.	1,987	2,092	586	1,052	..	2,053	29	54	..	..
5.	Italy	200	389	..	..	..	..	..	..	..	..
6.	Other Countries	464	714	503	887	..	..	..	..	..	..
TOTAL		81,519	107,217	171,216	84,019	20,380	43,230	4,242	7,563	6	17
GRAND TOTAL (14 mm. + 18mm.)		719,274	1,367,855	555,826	941,663	113,020	172,090	36,134	49,087	8,099	20,297
Other Sizes											
		13,905	25,311	8,052	14,529	N.A.	N.A.	N.A.	N.A.	11,459	42,950

N.A.—Not available.

NOTE.—Most of the figures for 1955 and 1956 were stated to be either incomplete, under reference or provisional.

13.1. Although MICO received permission from Bosch some three years ago to sell its sparking plugs to the Chinese State Trading Corporation, apart from furnishing samples to the Corporation, no exports took place. Auto Accessories has stated that it carried out a survey of the export market recently and found that it would be unable to compete in price with the foreign manufacturers due to the heavy duty levied on imported raw materials.

13.2. In pursuance of their policy to promote exports the Government of India have allowed rebate of customs and central excise duties paid on raw materials used in the manufacture of sparking plugs. The drawback admissible is the total of the average customs duty paid on imported materials and the average central excise duty paid on the excisable materials used in the manufacture of goods exported. The real handicap would appear to be the high cost of the domestic product due to the low volume of production as compared to that of foreign manufacturers of sparking plugs.

14. Automobile sparking plugs are at present assessed to duty under item No. 75(16) of the First Schedule to the Indian Tariff Act, 1934. The relevant extract is reproduced below:—

Item No.	Name of the article	Nature of duty	Standard rate of duty	Preferential rate of duty if the article is the produce or manufacture of			Duration of protective rates of duty
				The U.K.	A British Colony	Burma	
*75(16)	The following articles and parts thereof adapted for use as parts and accessories of motor vehicles, but excluding such articles and parts thereof as are adapted for use exclusively as parts and accessories of agricultural tractors namely:						
	Sparking plugs of 14 mm. and 18 mm. sizes including the resistor types but excluding integrally screened types.						
		Protective	92-1/2 per cent <i>ad valorem</i>	..	..	..	December, 31st, 1960.

\*Under the Government of India, Ministry of Finance (Revenue Division) Notification No. 196-Customs, dated 24th December, 1955, sparking plugs of the kind falling under this item, if of the United Kingdom manufacture, are exempt from the payment of so much of the customs duty leviable thereon as is in excess of 85 per cent *ad valorem*:

Provided that the said articles are not also adapted for use as parts and accessories of motor cars including taxi cabs.

15.1. At the time of the 1955 inquiry the Commission adopted the **C. i. f. prices** following c.i.f. price of A. C. plugs of U. K. origin for determining the quantum of protection.

<i>Description</i>	<i>C. i. f. price Rs.</i>
A. C. Sphinx sparking plug of 14 mm. size	1.01

In connection with the present inquiry, the Collectors of Customs, Bombay, Calcutta, Madras and Cochin have informed us that there have been no imports of sparking plugs of 14 mm. and 18 mm. sizes at their respective ports presumably because imports of 14 mm. and 18 mm. have been banned since the licensing period October 1957—March 1958. The importers also have not been able to furnish any information regarding c.i.f. prices of actual imports. However, a few importers have furnished estimated c.i.f. prices based on f.o.b. quotations which are given in Statement III.

15.2. MICO has informed us that the f.o.b. export price of standard types of 14 mm. and 18 mm. sparking plugs of M/s. Robert Bosch GmbH is DM 0.90 *i.e.*, Rs. 1.03 per piece.

15.3. Auto Accessories (India) Private Ltd. has furnished to us the f.o.b. price of 14 mm./18 mm. sparking plugs of its Associates (KLG) in U.K. as 1sh. 8d. (Rs. 1.11) per piece.

15.4. We are also informed by the representatives of the trade that the standard f.o.b. price for automobile sparking plug of U. S. A. manufacture is about 25 cents per piece, *i.e.*, about Rs. 1.20.

15.5. For determining the quantum of protection required by the industry we have adopted the lowest f.o.b. price of Rs. 1.03 furnished by MICO. With the addition of 5 nP. for marine freight and insurance the c.i.f. price at an Indian port comes to Rs. 1.08 per plug.

# STATEMENT III

## Statement showing C.I.F. Prices

Sl. No.	Source of information	Type and specification	Origin	Date	Unit	F.O.B. quotation		Freight & insurance		C.I.F. price	
						Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1.	Dodge & Seymour (India) Pvt. Ltd., Bombay.	Champion Spark Plug.	U.K.	1956-59	Per piece	..	..	..	..	1.44	1.44
		Do.	Do.	1960	Do.	..	..	..	..	1.47	1.47
		Do.	U.S.A. & Canada.	1956-59	Do.	..	..	..	..	1.35	1.35
		Do.	Do.	1960	Do.	..	..	..	..	1.48	1.48
2	Cycle & Automobile Components Ltd., Calcutta.	14 mm., 18 mm. CN & C14.	U.K.	1956-57	Do.	1.22	0.05	0.05	0.05	1.27	1.27
3.	Madras Auto Service Pvt. Ltd., Madras.	A.C.G.M.	France	..	Do.	1.23	0.07	0.07	0.07	1.30	1.30
		A.C. Sphinx 14 mm.	U.K.	..	Do.	1.23	0.06	0.06	0.06	1.29	1.29
4.	Raja Ram & Sons, Jullundur	Champion Spark Plug.	U.S.A.	..	Do.	..	..	..	..	1.48	1.48

16.1. Our Cost Accounts Officer examined the cost of production of MICO. This was the unit which was selected for cost investigation at the time of the two previous inquiries also. The period selected for costing was the 12 months ended December, 1958 for which alone the audited accounts were available when our Cost Accounts Officer visited the factory. Further, as the company is producing fuel injection equipment and its components also, by adopting this period it was possible to reconcile the overheads etc. allocated to the fuel injection equipment department in 1958 in connection with our inquiry into the fuel injection equipment with the allocations made to the sparking plug department. The report of the Cost Accounts Officer is forwarded to Government as a confidential enclosure to this Report.

16.2. The method of costing adopted was similar to the one adopted at the previous inquiries. We discussed with the representatives of the company the details of the actual costs and the basis for estimating costs for the future. For purposes of determining the cost, three most popular types of plugs, namely, HW175T1, HW145T2 and HM145T1 were taken. Wastage of raw material at the rate of 10 per cent has been allowed in the manufacture of sparking plug bodies. For other components manufactured, such as clamping nuts, washers and compensating ring wastages ranging from 2 to 5 per cent have been allowed. Provision for special tools and jigs has been reduced as in our view an estimated life of 4 years is on the low side. Payment of annual bonus equivalent to three months' basic wage has also been excluded from the cost as this should ultimately come from profits. It is not possible to compare our 1955 estimates of cost with the actual cost worked out by our Cost Accounts Officer this time. In 1955 the company was not making central electrodes and it was also using sub-assembled insulators. But it would be safe to say that the overall cost was lower in 1958 than in 1955. This is mainly due to the fact that there have been substantial increases in the production of plugs as well as other products manufactured in the factory. This had a definite effect on the cost of production of plugs. Further some machines are common for the manufacture of both the sparking plugs as well as fuel injection equipments and its components.

16.3. Our estimates for the future are based on the actual production achieved during the period April, 1959 to March, 1960. The quantities of raw material required and the wastages have been kept at the same level as in the period selected for costing. The costs of raw materials have been calculated at the latest prices available. Increases in the prices of raw materials at 8 per cent and components at 10 per cent on supplies made by Bosch with effect from February, 1960 have also been allowed. Depreciation has been allowed at income-tax rates after taking into account the additions made to the block during the year 1959-60. Although the Management claimed much larger increase in the overhead charges, an overall increase of 5 per cent is considered

adequate and has been allowed. Return has been allowed at 10 per cent on the capital employed taken as the value of the net assets plus the working capital requirements equivalent to 7 months' cost of production. Our estimates of fair ex-works prices are given below :—

	Per 100 pieces		
	H-W 175 T1(N)	H-W 145 T2(N)	H-M 145 T1(N)
	Rs.	Rs.	Rs.
1. Material costs . . . . .	104·65	111·42	155·68
2. Manufacturing costs including royalty . . . . .	87·97	91·24	99·53
3. Cost of production . . . . .	192·62	202·66	255·21
4. Return on capital employed . . . . .	18·48	19·04	22·08
5. Fair ex-works price . . . . .	211·10	221·70	277·29
Fair ex-works price per piece . . . . .	2·11	2·22	2·77

17. Since the bulk of the domestic production of sparking plugs is of 14 mm. short reach type we give below the comparison of ex-works price of indigenous type with the computed ex-duty landed cost of Bosch plug.

	Rs.
(a) C.i.f. price per Bosch sparking plug . . . . .	1·080
(b) Customs duty . . . . .	0·999
(c) Clearing charges . . . . .	0·005
	2·084
(d) Landed cost without duty . . . . .	1·085
(e) Fair ex-works cost including duty on imported components . . . . .	2·111
(f) Disadvantage of (e) against (d) . . . . .	1·026
(g) (f) as a percentage of c.i.f. price in (a) . . . . .	95%

The difference between the disadvantage as computed above and the existing rate of import duty of 92½ per cent is too small to warrant any revision.

18. Both units in the industry have pleaded for continuance of protection to sparking plugs beyond 31st December, 1960 and Government departments, transport organisations, automobile manufacturers and other consumers have supported the request for continuance of protection as the industry has shown good progress so far under protection.

**Measure of protection**

The quality of the output is satisfactory and prices charged are reasonable. The volume of production being small and also being dependent on imported raw material, the domestic industry is at a considerable disadvantage in regard to cost as compared with overseas manufacturers who produce sparking plugs in millions. Both the producers have pointed out that to them raw materials are more expensive than to their competitors abroad and that this situation would continue till such time as adequate supplies of raw materials are produced in the country at comparable costs. The wastage of raw materials in India is also relatively high. We are informed, since the loss of material in the production of sparking plug housing is practically eliminated in foreign countries when those are made on automatic machines by application of an extrusion process, the installation of such high cost equipment in India cannot be justified on the present level of indigenous production. Even with the attainment of a level of production of one million pieces it is felt by the domestic producers that they would be at a disadvantage as compared with the overseas manufacturers. A sparking plug being a vital part of the automobile engine, its manufacture as an ancillary industry is essential for the quick development of the automobile industry. Though import control gives the industry an assured domestic market for the present, because of its handicaps in regard to raw material and to the limited volume of production, we are of the view that protection to this industry should be continued till such time as it can bring down its cost substantially to the level of plugs produced in foreign countries. We, therefore, recommend that the existing protective duty of 92½ per cent *ad valorem* standard and 85 per cent *ad valorem* preferential for sparking plugs of British manufacture should be continued upto 31st December, 1963.

19.1. MICO sells its products direct to manufacturers of automobiles for original equipment. It has also rate contract agreement with the Director General of Supplies and Disposals for supplies to Government. It caters to the replacement market through distributors in important centres. It also provides for after sales service as the distributors handle the diesel equipment sales of MICO as well. Besides it has entered into an agreement with Premier Auto Electric Private Ltd., Bombay to supply them sparking plugs manufactured to the specifications of Bosch with the marking 'PRAKASH', and without any indication to show that it is either 'Bosch Licence' or MICO product. The company has also agreed to supply to the Premier Automobiles 'PRAKASH' plugs for original equipment to their Chrysler and Fiat vehicles. Supplies are made to Premier Auto Electric at Re. 1 less per dozen than the price charged to other distributors of MICO plugs. The Premier Auto Electric on the other hand has contracted to take not less than one lakh of plugs a year from MICO. We are informed that this agreement was entered into in 1956 when the company was finding it difficult to sell its products and Premier Auto Electric was then trying to obtain licence for the manufacture of 'Autolite' plugs for which it was agents in the country. The company's representative informed us that the lower rate was agreed to on account of the bulk purchase arranged and the

**Selling system and  
selling prices**



'PRAKASH' distributors relieving MICO of further storing and servicing responsibility. Though no unfair practice can be ascribed to this arrangement, we do not consider it proper that a protected unit in the automobile industry should obtain any advantage out of a protected ancillary industry, for another concern with which it is directly or indirectly connected, without passing on any marked benefit to the consumer.

19.2. Auto Accessories sells its products direct to manufacturers of automobiles for original equipment and to the Director General of Supplies and Disposals on rate contract basis. It has appointed Armstrong Smith Private Ltd., Bombay as its sole selling agent and the latter looks after the distribution of its products for replacement.

19.3. The wholesale price charged by MICO was Rs. 27.00 per dozen from April, 1957 to September, 1959. Consequent to the withdrawal of concession of duty on insulators, the wholesale price was raised to 30.00 per dozen. Its current prices for original equipment vary between Rs. 1.39 and Rs. 2.00 a piece. In the replacement market it is sold at Rs. 3.25 a piece. The prices at different tiers of distribution are for distributors Rs. 2.50 a piece, stockists Rs. 2.71 a piece, dealers Rs. 2.88 a piece and consumers Rs. 3.25 a piece. Although we were informed that the charging of higher prices for local consumers of plugs compared with that for original equipment and export is a common pattern in the industry the world over, we consider that with increased production an endeavour should be made to reduce consumer prices. Indirectly this may also serve to increase demand.

19.4. The original equipment price of Auto Accessories is Rs. 1.36 a piece. Its price for its sole selling agent is Rs. 2.31 a piece and the price in the replacement market is Rs. 3.25 a piece, the same as that of MICO.

20. Our conclusions and recommendations are summarised as **Summary of conclusions and recommendations** under :—

(1) The annual rated capacity of MICO is 750,000 plugs on double shift. The capacity of Auto Accessories is 360,000 plugs a year on single shift.

[Paragraph 7.]

(2) The total production of 14 mm. plugs during 1955, 1956, 1957, 1958, 1959 and 1960 (January-March) was 500,586, 234,333, 333,532, 700,801, 856,755 and 257,121 respectively and that of 18 mm. plugs during the corresponding years was 44,182, 12,434, 29,187, 32,930, 25,326 and 13,605.

[Paragraph 8.1.]

(3) The current demand for sparking plugs, both for replacement and for original equipment, is estimated at 1 million plugs. It is expected to increase at the rate of 5 to 10 per cent a year during the next three years.

[Paragraph 9.4.]

(4) The industry should make efforts to tap indigenous sources for the supply of raw materials such as cement filler and high refractory cement powder.

[Paragraph 10.]

(5) The quality of the indigenous product is satisfactory.

[Paragraph 11.5.]

(6) Protection to the industry should be continued upto 31st December 1963 at the existing rates of duty of 92½ per cent *ad valorem* standard and 85 per cent *ad valorem* preferential for sparking plugs of British manufacture.

[Paragraph 18.]

21. We wish to acknowledge the co-operation received by us from the manufacturers, importers and consumers of sparking plugs and the Government departments concerned in carrying out this inquiry.

**Acknowledgements**

K. R. P. AIYANGAR,  
*Chairman*

S. K. MURANJAN,  
*Member.*

R. S. BHATT,  
*Member.*

RAMA VARMA,  
*Secretary.*

BOMBAY,  
*Dated 20th July, 1960.*



## APPENDIX I

(Vide paragraph 3.1)

*List of firms, bodies and Government Departments to whom the Commission's questionnaires and letters were issued and from whom replies were received.*

\*Indicates those who replied.

†Indicates those who have stated that they are not interested.

### A. PRODUCERS :

- \*1. Auto Accessories (India) Private Ltd., Near Halav Bridge, Old Kurla, Bombay-37.
- \*2. Motor Industries Co. Ltd., Post Box No. 93, Adugodi, Bangalore-2.

### B. IMPORTERS :

- †1. Ashok Leyland Ltd., Bank of Mysore Buildings, N.S.C. Bose Road, Madras-1.
- \*2. A. R. Mukherjee & Co., Post Box No. 2273, P-74, Bentinck Street, Near Esplanade, Calcutta-1.
- \*3. The Associated Auto Parts Private Ltd., 445, Lamington Road, Bombay-4.
- 4. Automobile Products of India Ltd., Bhandup, Bombay.
- \*5. Cycle & Automobile Components (Private) Ltd., 4, Mission Row, Calcutta-1.
- \*6. Dodge & Seymour (India) Private Ltd., Laxmi Building, Ballard Road, Ballard Estate, Bombay-1.
- †7. General Motors Ltd., Post Box No. 39, Bombay.
- \*8. George Oakes Private Ltd., P.O. Box No. 499, Bombay-1.
- 9. Hindustan Motors Ltd., 8, India Exchange Place, Calcutta.
- \*10. India Motor Parts and Accessories Private Ltd., 1/155, Mount Road Madras-2.
- †11. Mahindra & Mahindra Ltd., Gateway Building, Apollo Bunder, Bombay-1.
- \*12. Madras Auto Service Private Ltd., 37, Mount Road, Madras-6.
- 13. The Premier Automobiles Ltd., Agra Road, Kurla, Bombay-37.
- \*14. Premier Auto Electric Private Ltd., 69, Tardeo Road, Bombay-7.
- \*15. Raja Ram & Sons, Nehru Garden Road, Jullundur City.
- \*16. Rane (Madras) Ltd., 5, Pattulos Road, Mount Road, Madras-2.
- †17. Standard Motor Products of India Ltd., 29, Mount Road, Madras.
- \*18. Vora Bros., New Queen's Road, Near Opera House, Bombay-4.

### C. CONSUMERS :

#### (i) *Manufacturers/Assemblers of Automobiles.*

- †1. Ashok Leyland Ltd., Bank of Mysore Building, N.S.C. Bose Road, Madras-1.
- \*2. Automobile Products of India Ltd., Bhandup, Bombay-40.
- 3. Hindustan Motors Ltd., 8, India Exchange Place, Calcutta.
- \*4. Mahindra & Mahindra Ltd., Gateway Building, Apollo Bunder, Bombay-1.
- \*5. The Premier Automobiles Ltd., Agra Road, Kurla, Bombay-37.
- \*6. Standard Motor Products of India Ltd., 29, Mount Road, Madras-2.
- \*7. The Enfield (India) Ltd., Royal Enfield Building, Thiruvottiyur, Madras-19.

(ii) *Fleet Owners.*

- \*8. Ahmedabad Municipal Transport Service, Outside Jamalpur Gate, P.O. Box No. 142, Ahmedabad-1.
- \*9. Bombay Electric Supply and Transport Undertaking, Best House, P.B. No. 192, Bombay-1.
- 10. Burmah Shell Oil Storage & Distribution Co., Burmah Shell House, Currimbhoy Road, Ballard Estate, Bombay-1.
- \*11. The Anamallai Bus Transport (Pvt.) Ltd., Goods-Shed Road, Pollachi.
- †12. The Canara Public Conveyance Co. Ltd., Mangalore-3.
- †13. Sri Rama Vilas Service (Private) Ltd., Kumbakonam (S. India).
- †14. Southern Roadways Private Ltd., T.V.S. Building, West Veli Street, Madurai.

(iii) *State Transport Services.*

- \*15. General Manager, Amritsar Omnibus Service, Amritsar.
- †16. Chairman, Bombay State Road Transport Corporation, Central Stores, Bellasis Road, Bombay-8.
- \*17. Transport Commissioner, Government Transport, Transport House, Mount Road, Madras-2.
- \*18. Director General, Directorate of Transportation, Government of West Bengal, 5, Nilgunge Road, Belghoria, 24-Parganas, West Bengal.

## D. ASSOCIATIONS :

- 1. The Secretary, All India Automobile & Ancillary Industries Association, Brabourne Stadium, 87, Veer Nariman Road, Bombay-1.
- 2. Association of Indian Automobile Mfrs., C/o. Tata Locomotive & Engineering Co., Army & Navy Building, Mahatma Gandhi Road, Bombay-1.
- \*3. The Secretary, Bombay Motor Merchants' Association, Sukh Sagar, Sandhurst Bridge, Bombay-7.
- \*4. The Secretary, Calcutta Motor Dealers' Association, P-6, Mission Row Extension, Calcutta-1.
- \*5. The Secretary, Delhi Motor Traders' Association, Post Box No. 1098, Kashmere Gate, Delhi-6.

## E. GOVERNMENT DEPARTMENTS :

- \*1. The Senior Industrial Adviser, Development Wing, Ministry of Commerce & Industry, Udyog Bhavan, Maulana Azad Road, New Delhi.
- \*2. The Director of Industries, Government of Mysore, Bangalore.
- \*3. The Director of Industries and Statistics Authority, Government of Bombay, Bombay.
- \*4. The Indian Institute of Science, Bangalore.
- \*5. The Director, Central Glass & Ceramic Research Institute, Calcutta.
- \*6. The Director, Indian Standards Institution, Manak Bhavan, Mathura Road, New Delhi.
- \*7. The Collector of Customs, Bombay.
- \*8. The Collector of Customs, Calcutta.
- \*9. The Collector of Customs, Madras.
- \*10. The Collector of Customs, Cochin.
- 11. The Chief Secretary to the Government of Bombay, Bombay.
- \*12. The Chief Secretary to the Government of Mysore, Bangalore.

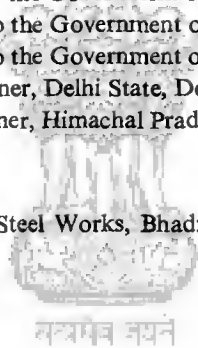
- \*13. Government Porcelain Factory, Post Box No. 4, Science Institute Post, Bangalore-12.
- \*14. The Secretary to the Government of India, Ministry of Defence, New Delhi.
- \*15. The Director of Co-ordination and Statistics, Directorate General of Supplies & Disposals, National Insurance Building, Parliament Street, New Delhi.

**F. STATE GOVERNMENTS :**

- 1. The Chief Secretary to the Government of Assam, Shillong.
- †2. The Chief Secretary to the Government of Uttar Pradesh, Lucknow.
- 3. The Chief Secretary to the Government of Bihar, Patna.
- 4. The Chief Secretary to the Government of Orissa, Bhubaneswar.
- 5. The Chief Secretary to the Government of Kerala, Trivandrum.
- 6. The Chief Secretary to the Government of Punjab, Chandigarh.
- \*7. The Chief Secretary to the Government of Andhra, Hyderabad.
- \*8. The Chief Secretary to the Government of Madras, Madras.
- †9. The Chief Secretary to the Government of Rajasthan, Jaipur.
- 10. The Chief Secretary to the Government of Madhya Pradesh Bhopal.
- 11. The Chief Secretary to the Government of Jammu & Kashmir, Srinagar.
- \*12. The Chief Secretary to the Government of West Bengal, Calcutta.
- 13. The Chief Commissioner, Delhi State, Delhi.
- 14. The Chief Commissioner, Himachal Pradesh, Simla.

**G. MISCELLANEOUS :**

The Mysore Iron & Steel Works, Bhadravati.



## APPENDIX II

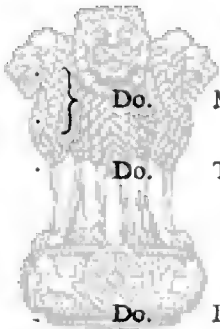
(Vide paragraph 3.4)

*List of persons who attended the public inquiry into the Continuance of Protection to the Automobile Sparking Plugs Industry on 6th May 1960.*

Name of the Representative		Name of the firm or body
(A) PRODUCERS :		
1. Shri E. Krimmel . . . . .	} Representing	Motor Industries Co. Ltd., Post Box No. 93, Adugodi, Bangalore-2.
2. Shri H. C. Krack . . . . .		
3. Shri Rajan . . . . .		
4. Shri K. S. Gaekwar . . . . .	} Do.	Auto Accessories (India) Private Ltd., Near Halav Bridge, Old Kurla, Bombay-37.
5. Shri S. A. Pradhan . . . . .		
(B) IMPORTERS & DEALERS :		
6. Shri M. V. Subramaniam . . . . .	Do.	Dodge & Seymour (India) Pri- vate Ltd., Laxmi Building, Ballard Estate, Bombay-1.
7. Shri M. K. Pillai . . . . .	Do.	George Oakes Private Ltd., P.O. Box No. 499, Bombay.
8. Shri M. A. Katrak . . . . .	Do.	Cycle & Automobile Compo- nents (Private) Ltd., 4, Mis- sion Road, Calcutta-1.
9. Shri M. P. Poncha . . . . .	Do.	Premier Auto Electric Private Ltd., 69, Tardeo Road, Bombay-7.
10. Shri K. V. Thomas . . . . .	Do.	Ditto.
11. Shri S. H. Fazalbhoy . . . . .	Do.	Ditto.
(C) CONSUMERS :		
12. Shri S. K. Shah . . . . .	Do.	Premier Automobiles Ltd., Agra Road, Kurla, Bombay-37.
13. Shri P. K. Palit . . . . .	Do	Mahindra & Mahindra Ltd., Gateway Bldg. Apollo Bunder, Bombay-1.
14. Shri M. S. Deva . . . . .	Do.	Automobile Products of India Ltd., Bhandup, Bombay-40.

Name of the Representative	Name of the firm or body
<b>(D) ASSOCIATIONS :</b>	
15. Shri N. Balkrishna . . . . .	Representing Association of Indian Automobile Manufacturers, C/o Tata Locomotive & Engineering Co., Army & Navy Building, Mahatma Gandhi Road, Bombay-1.
16. Shri S. B. Anand . . . . .	Do. Bombay Motor Merchants' Association Ltd., Sukh Sagar, Sandhurst Bridge, Bombay-7.

**(E) GOVERNMENT OFFICIALS :**

17. Shri N. T. Gopala Iyengar	Do.	Ministry of Commerce and Industry, (Development Wing) Udyog Bhavan, Maulana Azad Road, New Delhi.	
18. Major S. V. Rao		Do.	Ministry of Defence, New Delhi.
19. Shri J. C. Sabharwal			
20. Shri G. N. Gidwani			
21. Shri A. B. Rao	Do.	The Director of Co-ordination and Statistics, Directorate General of Supplies & Disposals, Shajahan Road, New Delhi.	
22. Shri P. Ramabrahman	Do.	Indian Standards Institution, Manak Bhavan, Mathura Road, New Delhi.	
		The Collector of Customs, Bombay.	